In the Claims:

Please amend Claims 7 and 15. Cancel Claims 11-13. A complete listing of the claims with proper claim identifiers is set forth below.

1. (Previously Presented) A process for producing a β -lactam compound comprising protecting the hydroxyl group of a compound represented by formula (1):

$$H_3C$$
 CO_2
 CO_2
 R_3
 R_3
 R_2

(wherein R_2 represents an aryl group or a heteroaryl group; and R_3 represents an alkyl group having 1 to 10 carbon atoms or a cycloalkyl group having 3 to 10 carbon atoms), to produce a compound represented by formula (2):

$$H_3C$$
 CH_3
 R_2
 CO_2
 CO_2
 R_3
 R_3

(wherein R_1 represents a trimethylsilyl group or a triethylsilyl group; and R_2 and R_3 are the same as above); cyclizing the compound (2) in the presence of a strong base wherein the strong base is a base selected from the group consisting of an alkali metal alkoxide, an alkali

metal amide, and an alkali metal hydride; and subsequently allowing the cyclized compound to react with diphenylphosphoryl chloride to produce a compound represented by formula (3):

$$H_3C$$
 CO_2
 CO_2
 R_3
 R_3
 C

(wherein R_1 and R_3 are the same as above).

- 2. (Cancelled)
- 3. (Previously Presented) The process according to Claim 1, wherein the alkali metal alkoxide is potassium tert-butoxide.
- 4. (Previously Presented) The process according to Claim 1, wherein the alkali metal amide is sodium bis(trimethylsilyl) amide.
- 5. (Previously Presented) The process according to Claim 1, wherein the alkali metal hydride is sodium hydride.
- 6. (Previously Presented) The process according to Claim 1, wherein the compound represented by formula (1) is produced by allowing a compound represented by formula (5):

$$H_3C$$
 OH
 H
 H
 H
 CH_3
 S
 R_2
 $COOH$
 $COOH$

(wherein R_2 represents an aryl group or a heteroaryl group), to react with a compound represented by formula (6):

$$R_3 \longrightarrow X$$
 (6)

(wherein R₃ represents an alkyl group having 1 to 10 carbon atoms or a cycloalkyl group having 3 to 10 carbon atoms; and X represents a halogen atom), in the presence of a base.

7. (Currently Amended) A process for producing a β -lactam compound represented by formula (4):

$$H_3$$
C
 CO_2
 CO_2
 CO_2
 CO_3
 CO_2
 CO_3
 CO_3
 CO_3
 CO_4
 CO_3
 CO_4
 CO_5
 CO_5

(wherein R_3 represents an alkyl group having 1 to 10 carbon atoms or a cycloalkyl group having 3 to 10 carbon atoms), the process comprising deprotecting the hydroxyl moiety of the compound represented by formula (3) produced by the process according to any one of Claims 1 to 61 and 3-6.

8. (Previously Presented) A compound represented by formula (1):

$$H_3C$$
 CH_3
 R_2
 CO_2
 CO_2
 R_3
 R_3

(wherein R_2 represents an aryl group or a heteroaryl group; and R_3 represents an alkyl group having 1 to 10 carbon atoms or a cycloalkyl group having 3 to 10 carbon atoms).

- 9. (Original) The compound according to Claim 8, wherein R_2 is a phenyl group or a p-chlorophenyl group.
- 10. (Original) The compound according to Claim 8 or 9, wherein R_3 is a tert-butyl group.
 - 11. (Cancelled)
 - 12. (Cancelled)
 - 13. (Cancelled)
 - 14. (Previously Presented) A compound represented by formula (4):

$$H_3C$$
 OH
 H
 CH_3
 CO_2
 O
 R_3
 (4)

(wherein R_3 represents an alkyl group having 1 to 10 carbon atoms or a cycloalkyl group having 3 to 10 carbon atoms).

15. (Currently Amended) The compound according to Claim 14, wherein R_3 is a tert-butyl group.

(In the formulae, R_1 represents a trimethylsilyl group or a triethylsilyl group; R_2 represents an aryl group or a heteroaryl group; R_3

represents an alkyl group having 1 to 10 carbon atoms or a cycloalkyl group having 3 to 10 carbon atoms; and X represents a halogen atom.)